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EXAMINER

JANVIER, JEAN D

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/804,735	<b>Applicant(s)</b> SRINIVASAN ET AL.	
	<b>Examiner</b> JEAN JANVIER	<b>Art Unit</b> 3688	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/15/2008 has been entered and a Non-Final Action follows.

**Response to Applicant's Amendment**

The Examiner approves the new title of the invention and the amendments to the claims.

**Response to Applicant's Arguments**

First, The Examiner also notes that the claims or at least the independent claims never actually or completely eliminate the need for receiving other type of advertiser's criteria or specifications (configuration data) from an advertiser.

In general, Applicant's arguments with respect to the claimed invention have been considered, but are moot in view of the new ground(s) of rejection.

**(See below the previously submitted arguments)**

“Contrary to the Applicant's findings, Robinson does not teach away from the claimed invention since both systems (i.e. Robinson's and the present claimed invention) are configured to display advertisements (experiments or promotions) to random visitors of a website and to determine therefrom the optimal promotion/advertisement based on the random visitors' responses to the displayed ads or promotions (experiments). Further, although the present claimed invention does not specifically recite using the visitors' profile, however, that does not

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expressly exclude the use of some kind of profiling. In fact, the advertiser has to employ some kind of measurement with respect to the type of visitors he wants to target; otherwise, the advertising may end up sending inappropriate promotions or promotional materials to minors (e.g. sending a car ad to a minor). In addition, selecting by the advertiser the website where the ads should be displayed is a form of targeting. Moreover, the notion that the optimal experiment is determined in real-time appears to be more complicated than the Applicant may have anticipated. In practice, collecting responses to displayed ads from a sample of 6,000.00-10,000.00 visitors, for example, to thereby determine an optimal promotion/experiment/ad may take minutes, hours or even days.

In a further embodiment, a new ad(s) is randomly displayed to a certain number of users (random visitors) during a first period of time or training period. During this "training period" for the new ad, a certain percentage of the members of the subject's community will click on it. If this is an unusually high proportion, then there is a relatively high likelihood that the ad will be of relatively high interest to the subject (determining an optimal advertisement in accordance with the merchant's or advertiser's configuration data). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which we can assume that **a randomly-chosen member of the subject's community (will tend to click on the ad; this probability is used as the measure of similarity)**. (Randomly chosen visitors are exposed to one or more new ads before an optimal advertisement or the ad with the highest click-through percentage is determined. See col. 3: 3-15).

Robinson further discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number (percentage) of users **or visitors from a pool or a**

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**set/number of visitors visiting a website predefined by an advertiser (receiving configuration data from an advertiser indicating that the advertiser wants to target the visitors visiting a particular website based on some criteria and random sampling or randomly selecting a subset or a certain number of visitors, out of the set of visitors visiting the website, to be exposed to the advertiser's advertisements or experiments and to thereby determine the optimal advertisement or experiment based on the certain number or randomly selected visitors' responses). During this "training period" for the new ad, a certain percentage of the members of the subject's community will click on the new ad.** If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

In addition, for **each ad from a plurality of new ads submitted by an advertiser**, there will have to be a period when ACF (Automated Collaborative Filtering) techniques are not the sole determinant of which (optimal) ad is displayed. **Instead, such ads will be displayed either according to a fixed schedule or randomly.** Moreover, a particular embodiment of the present system could also choose to continually have a probability that the ad(s) shown to a user(s) at any given time might **be randomly chosen rather than selected by ACF techniques (here, the ads or experiments are selected from a plurality of ads and displayed to users or visitors (at random) when they visit particular web sites predetermined or chosen by an advertiser or merchant (or based on the merchant's configuration data))**. There is a tradeoff when the ads are being randomly displayed or presented to the users (chosen at random). Indeed, the more ads are randomly presented, a) the more data the system will be able to collect for the ACF engine, thereby increasing the accuracy of the engine; and b) the more frequently users will be exposed to random ads that are not relevant to their interests. Here, the ACF engine, using the data compiled from the randomly displayed ads, will be able to determine one or more ads (one or more optimal ads) having received an unusually high proportion of click-throughs by the users (chosen at random), wherein the displayed ads are not based on the users' interests, but rather on the display web sites pre-selected by an advertiser or merchant (or based on the merchant's configuration data) (Col. 19: 6-17; col. 5: 10 to col. 6: 42; col. 19: 18-33)."

Second, contrary to the Applicant's remarks, Lipsky does not teach away from the claimed invention. Indeed, Lipsky discloses, inter alia, a method of and a system for, in a

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computing device, adjusting the execution of an advertising campaign for presenting advertising messages/experiments to a plurality of users or (random website visitors), the advertising campaign, having a plurality of advertising alternatives for presenting advertising messages/experiments, comprising: during a first time period, presenting advertising messages/experiments to users among the plurality of users using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives (presenting advertisement or promotions/experiments to a randomly selected subset of users from a number/plurality of users or website visitors who are to participate in the advertising campaign); tracking the performance of the advertising campaign with respect to each of the advertising alternatives (advertising messages) across the plurality of users; based upon the tracking during the first time period, attributing a performance score to each of the advertising alternatives for the first time period (measuring the effectiveness of each ad presented to the users by tracking the performance or the users' action...); comparing the scores attributed to the advertising alternatives for the first time period, wherein the comparison is performed using confidence intervals about the performance scores; based upon the comparison, adjusting the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives comparing favorably in the comparison and so as to reduce one or more allocations for advertising alternatives comparing unfavorably in the comparison (determining based on the above comparison, the optimal experiments/advertisement or promotions, which maximize the advertisers' return on investment or are more suitable to be displayed to the users (the rest of the users from the plurality of random users)); and during a second time period, presenting advertising messages to users among the plurality using each of the advertising

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alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See claim 3 of the present reference; fig. 2).

In addition, Lipsky teaches a system for presenting advertising messages in a group of advertising messages to a plurality of random users (random website visitors), comprising: during an evaluation period, presenting the advertising messages to a randomly selected subset of users from the plurality of users/website visitors who are to participate in an advertising campaign; assessing the effectiveness of presenting each of the advertising messages or experiments during the evaluation period across the plurality of users (measuring the effectiveness of each presented advertisement or promotion or experiment); assigning presentation weights to the presented advertising messages of the group in accordance with their assessed effectiveness; and during a weighted presentation period, presenting to users among the plurality of users the advertising messages of the group with relative frequencies that are in accordance with their weights (determining one or more optimal advertisement or promotions/experiments based on the weighting...) (See claim 5 of the reference; figs. 3-5).

Here, even if two web sites were used to conduct the advertising campaign, the ads would be presented in the same manner to random visitors to the sites and the determination of an optimal ad or experiment would be conducted in a similar fashion. Further, the claimed invention is not limited to a single or unique web site.

Second of all, contrary to the Applicant's findings, Robinson does not teach away from the claimed invention since both systems are configured to display advertisement or promotions (experiments or promotions) to random visitors of a website and to determine therefrom the optimal promotion based on the random visitors' responses to the displayed ads or promotions.



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Further, although the present claimed invention does not specifically recite using the visitors' profile, however, that does not expressly exclude the use of some kind of profiling. In fact, the advertiser has to employ some kind of measurement with respect to the type of visitors he wants to target; otherwise, the advertising may end up sending inappropriate promotions or promotional materials to minors (e.g. sending a car ad to a minor). In addition, selecting by the advertiser the website where the ads should be displayed is a form of targeting. Moreover, the notion that the optimal experiment is determined in real-time appears to be more complicated than the Applicant may have anticipated. In practice, collecting responses to displayed ads from a sample of 6,000.00-10,000.00 visitors, for example, to thereby determine an optimal promotion/experiment/ad may take minutes, hours or even days.

Therefore, the Applicant's request for allowance or withdrawal of the last Office Action has been fully considered and respectfully denied in view of the foregoing response since the Applicant's arguments, as herein presented, are not persuasive.

## **DETAILED ACTION**

### **Specification**

### **Status of the claims**

Claims 1-20 are currently pending in the Instant Application.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 as drawn to a non-statutory subject matter. The claims (or at least independent claim 1) are related to mental processes, which is not patentable. Indeed, the claims (e.g. claim 1) recite a (mental) process, which is not tied to another statutory class or does not change or switch statutory class (such as a particular apparatus) or does not transform the underlying subject matter (such as an article or materials) to a different state or thing. Here, "Internet website" represents a nominal recitation. Furthermore, the promotions or advertisements, according to the claim language, are not even run or displayed to the visitors on the web site, which could have implied a switch in statutory class. See MPEP §2106.IV.B: *Determine Whether the Claimed Invention Falls Within An Enumerated Statutory Category*. See also the following U.S. Supreme Court cases: *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); and *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

### **Double Patenting Rejection**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claim 1 of the Instant Application (Re. 02/15/2008 Response)** is provisionally rejected on the ground of non-statutory double patenting over **claim 1 of co-pending Application Serial No. 09/805,336 (Re. 01/23/2008 Response)**. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

**Claim 1 of the Instant Application:**

**1. (Currently Amended)** A method of dynamically determining an optimal advertisement to be used by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises:

a sample size of visitors to the Internet website who are to participate in an experiment, and

time-related information concerning the experiment;

(b) randomly choosing visitors to the Internet website to comprise a sample of visitors to participate in the experiment according to the configuration data;

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© running the experiment according to the configuration data on the randomly chosen visitors to produce sampling data, **wherein the experiment comprises:**

presenting a plurality of varied advertisements to different visitors within the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied advertisements on the sample;

9d) dynamically determining an optimal advertisement using real-time analysis of the sampling data and

(e) thereafter using the advertisement determined (d).

**Claim 1 of the co-pending Application 09/805,336**

1. (Currently Amended) A method of dynamically determining an optimal promotion to be offered on an Internet website operated by an Internet merchant, comprising:

(a) receiving configuration data from the Internet merchant, wherein such configuration data comprises:

a sample size of visitors to the Internet website who are to participate in an experiment; and

time-related information concerning the experiments;

(b) randomly choosing visitors to the Internet website to participate in the experiment according to the configuration data;

© running **the experiment** according to the configuration data on randomly chosen sample of visitors to produce sampling data, **wherein the experiment comprises:**

presenting a plurality of varied promotions (advertisements) to different visitors within the sample according to the configuration data; and

measuring the effectiveness of the plurality of varied promotions on the promotions (advertisements) on the sample;

(d) dynamically determining an optimal promotion using real-time analysis of the sampling data from the experiment, **wherein the optimal promotion optimizes at least one economic variable selected from a group of economic variables**; and

(e) displaying or providing the optimal promotion to the Internet merchant.

In claim 1 of the co-pending Application, in “**wherein the optimal promotion or advertisement optimizes at least one economic variable selected from a group of economic variables**” is an “**intended use recitation**”, which is also accomplished in claim 1 of the Instant Application.

As seen, the claims are very similar except that claim 1 of the Instant Application refers to an advertisement, whereas claim 1 of the co-pending Application mentions a promotion. However, an advertisement is considered to be a promotion and the terms advertisement and promotion are used interchangeably in the art, as one skilled in the art would have concluded at the time the Applications were filed. This conclusion is well within the level of skills of an ordinary artisan who would have concluded at the time of the invention that an advertisement is a promotion and a promotion is an advertisement and hence, the claims are not patentably distinct.

Similar remarks can be made for the other independent claims involved in the Applications. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson, US Patent 5, 918, 014.

As per claims 1-20, Robinson discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number (percentage) of users **or visitors from a pool or a set/number of visitors visiting a website predefined by an advertiser (receiving configuration data from an advertiser indicating that the advertiser wants to target the visitors visiting a particular website based on some criteria and random sampling or randomly selecting a subset or a certain number of visitors, out of the set of visitors visiting the website, to be exposed to the advertiser's advertisements or experiments and to thereby determine the optimal advertisement or experiment based on the certain number or randomly selected visitors' responses). During this "training period" for the new ad, a certain percentage of the members of the subject's community will click on the new ad.** If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques are used to determine a probability, associated with a

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fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

**Furthermore, for each ad from a plurality of new ads submitted by an advertiser, there will have to be a period when ACF (Automated Collaborative Filtering) techniques are not the sole determinant of which (optimal) ad is displayed. Instead, such ads will be displayed either according to a fixed schedule or randomly. Moreover, a particular embodiment of the present system could also choose to continually have a probability that the ad(s) shown to a user(s) at any given time might be randomly chosen rather than selected by ACF techniques (here, the ads from a group or a plurality of ads (or from a campaign or experiment) are selected from a plurality of ads and displayed to users or visitors (at random) when they visit particular web sites predetermined or chosen by an advertiser or merchant (or based on the merchant's configuration data)). There is a tradeoff when the ads are being randomly displayed or presented to the users (chosen at random). Indeed, the more ads are randomly presented, a) the more data the system will be able to collect for the ACF engine, thereby increasing the accuracy of the engine; and b) the**

**more frequently users will be exposed to random ads that are not relevant to their interests**

(col. 19: 6-17). The desired proportion of displaying ads according to the ACF output relative to displaying ads randomly or according to a fixed schedule can be determined by measuring such factors as overall system-wide number of responses to ads in a given period of time (which should ideally be high) and polling users on their satisfaction with the system. A mathematical analysis could also be used in predicting the best proportion (col. 19: 18-26). **Here, the ACF engine, using the data compiled from the randomly displayed ads, will be able to determine one or more ads (one or more optimal ads) having received an unusually high proportion of click-throughs by the users (originally chosen at random), wherein the displayed ads are not based on the users' interests, but rather on the display web sites pre-selected by an advertiser or merchant (or based on the merchant's configuration data) (Col. 19: 6-17; col. 5: 10 to col. 6: 42; col. 19: 18-33).**

Robinson further discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number of users or visitors (sampling visitors). During this "training period" for the new ad, **a certain percentage of the members of the subject's community will click on the new ad.** If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a



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new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

Additionally, it is understood that once a user's or subject's community or associated group is known, then targeted ads scheduled to be displayed to the user or subject are determined based on a correlation between the group's profile and the user's profile (according to the advertiser's or merchant's specifications or criteria or received configuration data). Subsequently, a web site, where the ads will be presented, related to these targeted ads is updated accordingly to reflect the generation of these targeted ads such that the ads can be displayed to the user or subject in a future visit at the web site (associated with at least one generated ad) contingent upon the advertiser's specifications.

In general, Robinson discloses a stem for displaying a targeted (optimal) advertisement from an advertiser to at least one second user (subject) if a plurality of first users from the subject's community or if an unusually high proportion of members from the subject's community (high proportion of the first users), having similar profile as the subject or second user, have indeed clicked on the same advertisement. Here, the advertiser has provided one or more advertisements along with display criteria **(merchant's configuration data, which assist in communication with the Internet merchant or help deliver the merchant's advertisements to the Internet**

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**visitors**), such as demographics, that the users must have before the advertisements can be presented to them. The system is configured to at least display one targeted advertisement to a plurality of first users (randomly selected) matching the merchant's received configuration data or advertiser's display criteria. Subsequent to displaying a plurality of advertisements (multiple experiments) to a plurality of different groups of first users with different profiles matching the advertisements display criteria during a training period or test period (randomly sampling visitors in accordance with the merchant's configuration data), training or test data are collected and used to determine which advertisement(s) among the plurality of displayed advertisements receives an unusually high proportion of clicks from a plurality of first users (determining an optimal advertisement from the multiple experiments or advertisements). And the advertisement receiving the highest number of clicks from a first plurality of users having a specific profile is qualified as the **optimal advertisement**. Thereafter, the **optimal advertisement is displayed to at least a second user having a similar profile as the first plurality of users viewing the (optimal) advertisement since** people who have shown a tendency for similar likes and dislikes in the past will show a tendency for such similarities in the future

See fig. 1; Col. 1: 27 to col. 3: 46; col. 7: 47 to col. 8: 20; see claims 1-25 of the present reference.

In a further embodiment, a new ad(s) is randomly displayed to a certain number of users (random visitors) during a first period of time or training period. During this "training period" for the new ad, a certain percentage of the members of the subject's community will click on it. If this is an unusually high proportion, then there is a relatively high likelihood that the ad will be of relatively high interest to the subject (determining an optimal advertisement in accordance

with the merchant's or advertiser's configuration data). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which we can assume that **a randomly-chosen member of the subject's community (will tend to click on the ad; this probability is used as the measure of similarity).** (Randomly chosen visitors are exposed to one or more new ads before an optimal advertisement or the ad with the highest click-through percentage is determined. See col. 3: 3-15).

**In short, in one embodiment, a new ad (from a group of ads or experiment) is displayed ~~randomly~~ or on a fixed schedule to a certain number of users (sample size). During this "training period" (timing data) for the new ad, a certain percentage of the members of the subject's community will click on the ad. If this is an unusually high proportion, then there is a relatively high likelihood that the ad will be of relatively high interest to the subject. In one embodiment, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which we can assume a ~~randomly~~-chosen member of the subject's community will tend to click on the ad. This probability is used as the measure of similarity (col. 3: 3-15).**

**Finally, it should further be noted here that the system does not take into consideration the user data or profile information related to the original certain number of users and it is after one or more ads from a plurality of ads (from an experiment or campaign) is displayed to the certain number of users (randomly chosen or selected) that the system considers the profile of the certain number of users to see if they have similar profile as a second user or subject (belonging to the subject's community) and if a high proportion of the certain number of users like at least one ad from the randomly displayed**

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**ads or an unusually high proportion of the certain number of users have actually clicked on the new ad or the at least one ad, then there is a high probability that the subject or second user will be interested in the new ad or the at least one ad, from the ads randomly displayed during the training period, or the new ad or the at least one ad (optimal) ad, receiving an unusually high number of click-throughs, will be presented thereafter to the subject or second user (col. 3: 3-15; col. 19: 6-26).**

As per claims 1 and 20, although Robinson suggests a process for randomly selecting a sample size or a certain number of users or web site visitors, randomly chosen, that is to receive during a training period a plurality of random ads, from a group or experiment, or a process for receiving a target audience criteria such as demographics (Internet merchant or advertiser configuration data), however, Robinson does not expressly mention that the advertiser's configuration data specify a sample size of users or visitors.

However, it is well documented in the art that an advertiser (Internet merchant) will submit to an advertising medium one or more desired criteria or specifications (configuration data) used to target an audience or to display one or more advertisements. For instance, an interested advertiser may submit to an advertising medium, with respect to at least one ad, a list of one or more criteria, such as start-time and end-time, a specific number of users/visitors (sample size) that should see the ad, a related number of hits or number of click-throughs that should be met, et cetera, before the ad can be successful.

"Official Notice"

Therefore, it would have been obvious to an ordinary skilled artisan, at the time of the invention, to incorporate the above disclosure (“Official Notice”) into the system of Robinson so as to expressly receive from an advertiser, instead of letting the web site or advertising medium select a certain number of users or visitors (sample size), a sample size or target size of users or visitors, randomly selected from the site visitors, that should be exposed to the random ads during a training period, thereby giving more control or latitude to the advertiser to specify himself other configuration data such as a sample size of random visitors that should be exposed to the random ads during a training period in order to determine an optimal ad therefrom, while reducing the liability of the advertising medium or web site if the advertising campaign or experiment, comprising the random ads, is not successful for one reason or another or because the selected sample size was too small.

**Claims 1-20 are rejected under 35 USC 103(a) as being unpatentable over Lipsky, US Patent 7,031,932.**

As per claims 1-20, Lipsky discloses a facility for adjusting the execution of an advertising campaign in which advertising messages (experiments) are presented to users using a plurality of advertising alternatives. During a first time period, the facility presents advertising messages using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives. Also during the first time period, the facility tracks the performance of the advertising campaign with respect to each of the advertising alternatives. Based upon the tracking during the first time period, the facility attributes a performance score to each of the advertising alternatives for the first time period. The facility compares these scores,

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and, based upon the comparison, adjusts the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives, which compare favorably in the comparison, and so as to reduce one or more allocations for advertising alternatives comparing unfavorably in the comparison. The facility then, during a second time period, presents advertising messages using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See abstract).

In an exemplary embodiment, reallocating between cost packages may involve negotiating with the publisher or other seller of a higher-performing cost package to increase the volume of the higher-performing cost package, as well as negotiating with the publisher or other seller of a lower-performing cost package to cancel or decrease the volume of the lower-performing cost package. Reallocating between the placements of a cost package may involve negotiating with the publisher or other seller of the cost package to increase the volume of the higher-performing allocations of the cost package and decrease the volume of the lower-performing allocations of the cost package. **Reallocating between advertising messages presented in a placement may involve increasing the probability that higher performing advertising messages are served in response to an advertising message request for the placement and decreasing that probability for lower-performing advertising messages.**

After adjusting these allocations in accordance with the effectiveness scores, the facility continues the campaign using these new allocations, again maintaining performance statistics in order to later perform further reallocations. It is herein understood that once one or more high performing (optimal) ads are determined, the facility should provide and/or present (display) the

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high performing (optimal) ads to the advertiser or merchant related to the high performing or optimal ads (Col. 2: 62 to col. 3: 15).

In general, Lipsky discloses a system that displays ads (experiments) to users and monitors the ads performance by tracking the users' responses to the displayed ads and adjusting the ads variables or parameters (reallocating step) to increase the users' responses or the ads performance, thereby determining one or more higher-performing (optimal) ads that will be presented to users in the future.

Further, Lipsky discloses a method of and a system for, in a computing device, adjusting the execution of an advertising campaign for presenting advertising messages/experiments to a plurality of users or (random website visitors), the advertising campaign, having a plurality of advertising alternatives for presenting advertising messages/experiments, comprising: during a first time period, presenting advertising messages/experiments to users among the plurality of users using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives (presenting advertisement or promotions/experiments to a randomly selected subset of users from a number/plurality of users or website visitors who are to participate in the advertising campaign); tracking the performance of the advertising campaign with respect to each of the advertising alternatives (advertising messages) across the plurality of users; based upon the tracking during the first time period, attributing a performance score to each of the advertising alternatives for the first time period (measuring the effectiveness of each ad presented to the users by tracking the performance or the users' action...); comparing the scores attributed to the advertising alternatives for the first time period, wherein the comparison is performed using confidence intervals about the performance scores; based upon the

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comparison, adjusting the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives comparing favorably in the comparison and so as to reduce one or more allocations for advertising alternatives comparing unfavorably in the comparison (determining based on the above comparison, the optimal experiments/advertisement or promotions, which maximize the advertisers' return on investment or are more suitable to be displayed to the users (the rest of the users from the plurality of random users)); and during a second time period, presenting advertising messages to users among the plurality using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See claim 3 of the present reference; fig. 2).

Finally, Lipsky teaches a system for presenting advertising messages in a group of advertising messages to a plurality of random users (random website visitors), comprising: during an evaluation period, presenting the advertising messages to a randomly selected subset of users from the plurality of users/website visitors who are to participate in an advertising campaign; assessing the effectiveness of presenting each of the advertising messages or experiments during the evaluation period across the plurality of users (measuring the effectiveness of each presented advertisement or promotion or experiment); assigning presentation weights to the presented advertising messages of the group in accordance with their assessed effectiveness; and during a weighted presentation period, presenting to users among the plurality of users the advertising messages of the group with relative frequencies that are in accordance with their weights (determining one or more optimal advertisement or promotions/experiments based on the weighting...) (See claim 5 of the reference; figs. 3-5).



As per claims 1 and 20, although Lipsky suggests a process for displaying advertisements or promotions to a group of users or web site visitors, randomly chosen, however, Lipsky does not expressly mention that the advertiser's configuration data specify a sample size of random users or visitors.

However, it is well documented in the art that an advertiser (Internet merchant) will submit to an advertising medium one or more desired criteria or specifications (configuration data) used to target an audience or to display one or more advertisement or promotions. For instance, an interested advertiser may submit to an advertising medium, with respect to at least one ad, a list of one or more criteria, such as start-time and end-time, a specific number of users/visitors (sample size) that should see the ad, a related number of hits or number of click-throughs that should be met, et cetera, before the ad can be successful.

#### "Official Notice"

Therefore, it would have been obvious to an ordinary skilled artisan, at the time of the invention, to incorporate the above disclosure ("Official Notice") into the system of Lipsky so as to expressly receive from an advertiser, instead of letting the web site or advertising medium or facility select a certain number of users or visitors (sample size), a sample size or target size of users or visitors, randomly selected from the site visitors, that should be exposed to the ads or promotions during a first period of time, thereby giving more control or latitude to the advertiser to specify himself other configuration data such as a sample size of random visitors that should be exposed to the ads or promotions during at least the first period of time in order to determine one or more optimal ads or high performing promotions therefrom, while reducing the liability of the advertising medium/facility or web site if the advertising campaign or experiment,

comprising the ads or promotions, is not successful for one reason or another or because the selected sample size was too small.

### **Conclusion**

Although the following references were not used in the Office Action, they were highly considered by the Examiner. Applicants are further directed to consult these references.

USP 5,848,396 to Gerace discloses a computer network method and apparatus for providing targeting of appropriate audience based on psychographic or behavioral profiles of end users. The psychographic profile is formed by recording computer activity and viewing habits of the end user. Content of categories of interest and display format in each category are revealed by the psychographic profile, based on user viewing of ad information. Using the profile (with or without additional user demographics), **advertisements** are displayed to appropriately selected users. Based on regression analysis of recorded responses of a first set of users viewing the **advertisements** the target user profile is refined. Viewing by and regression analysis of recorded responses of subsequent sets of users continually auto-targets and customizes ads for the optimal end user audience (See abstract; fig. 5B and its related embodiment).

USP 6,286,005B1 to Cannon discloses a computer-based decision support system that includes three main components: a database mining engine (DME); an advertising optimization mechanism; and a customized user interface that provides access to the various features of the invention. The user interface, in conjunction with the DME, provides a unique and innovative way to store, retrieve and manipulate data from existing databases containing media-related audience access data, which describe the access habits and preferences of the media audience. By using a database with a simplified storage and retrieval protocol, the data contained therein can

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be effectively manipulated in real time. This means that previously complex and lengthy information retrieval and analysis activities can be accomplished in very short periods of time (typically seconds instead of minutes or even hours). Further, by utilizing the advertising optimization mechanism of the present invention, businesses, networks, and advertising agencies can interactively create, score, rank and compare various proposed or actual advertising strategies in a simple and efficient manner. This allows the decision-makers to more effectively tailor their marketing efforts and successfully reach the desired target market while conserving scarce advertising capital. Finally, the user interface for the system provides access to both the DME and the optimization mechanism in a simple and straightforward manner, significantly reducing training time (See abstract).

US Patent 6,567,786 to Bibelnicks discloses a method, and system for increasing the efficiency of customer contact strategies is disclosed. Customers are analyzed based upon historical criteria; a promotional plan (a group of promotion events implemented or to be implemented over a particular time period) is analyzed to determine the effect of each promotion event on the other promotion events in the promotional plan; and, based on this analysis, the optimal promotion stream (a specific subset of the promotional plan to be sent to customers or a group of similar customers) is determined so as to maximize the ROI of the promotional plan as a whole (See abstract).

US Patent 6, 338, 066 to Martin discloses a log of previous web-surfer behavior listing the order in which each surfer downloaded specific items at the web site, and given a meaningful classification of those same items, future surfer behavior is predicted by the present invention. The algorithm utilizes a quantitative model relating items downloaded prior to some specified

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event to items downloaded after that same event. When the model is applied to a new surfer's session prior to an analogous event, the present invention predicts the likely behavior of the surfer subsequent to that event. The predicted behavior is then further analyzed to derive a quantitative value for the utility of the expected behavior. By randomly selecting sample sessions from a web log, multiple models of surfer behavior can be generated. The multiple models can then be applied to a new surfer's session to produce a predicted behavior/utility distribution and thus a confidence interval for the predicted behavior/utility (See abstract).

US Patent 6, 356,879 to Aggarwal discloses a system for deriving product characterizations for products offered at an e-commerce site based on the text descriptions of the products provided at the site. A customer characterization is generated for any customer browsing the e-commerce site. The characterizations include an aggregation of derived product characterizations associated with products bought and/or browsed by that customer. A peer group is formed by clustering customers having similar customer characterizations. Recommendations are then made to a customer based on the processed characterization and peer group data (See abstract).

US Patent 6, 430, 539 to Lazarus discloses a predictive modeling of consumer financial behavior is provided by application of consumer transaction data to predictive models associated with merchant segments. Merchant segments are derived from consumer transaction data based on co-occurrences of merchants in sequences of transactions. Merchant vectors representing specific merchants are clustered to form merchant segments in a vector space as a function of the degree to which merchants co-occur more or less frequently than expected. Each merchant segment is trained using consumer transaction data in selected past time periods to predict

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spending in subsequent time periods for a consumer based on previous spending by the consumer. Consumer profiles describe summary statistics of consumer spending in and across merchant segments. Analysis of consumers associated with a segment identifies selected consumers according to predicted spending in the segment or other criteria, and the targeting of promotional offers specific to the segment and its merchants (See abstract).

**US Patent 7,031,932 to Lipsky** discloses a facility for adjusting the execution of an advertising campaign in which advertising messages (experiments) are presented to users using a plurality of advertising alternatives. During a first time period, the facility presents advertising messages using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives. Also during the first time period, the facility tracks the performance of the advertising campaign with respect to each of the advertising alternatives. Based upon the tracking during the first time period, the facility attributes a performance score to each of the advertising alternatives for the first time period. The facility compares these scores, and, based upon the comparison, adjusts the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives, which compare favorably in the comparison, and so as to reduce one or more allocations for advertising alternatives comparing unfavorably in the comparison. The facility then, during a second time period, presents advertising messages using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See abstract).

In an exemplary embodiment, reallocating between cost packages may involve negotiating with the publisher or other seller of a higher-performing cost package to increase the volume of the higher-performing cost package, as well as negotiating with the publisher or other

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seller of a lower-performing cost package to cancel or decrease the volume of the lower-performing cost package. Reallocating between the placements of a cost package may involve negotiating with the publisher or other seller of the cost package to increase the volume of the higher-performing allocations of the cost package and decrease the volume of the lower-performing allocations of the cost package. **Reallocating between advertising messages presented in a placement may involve increasing the probability that higher performing advertising messages are served in response to an advertising message request for the placement and decreasing that probability for lower-performing advertising messages.**

After adjusting these allocations in accordance with the effectiveness scores, the facility continues the campaign using these new allocations, again maintaining performance statistics in order to later perform further reallocations. It is herein understood that once one or more high performing (optimal) ads are determined, the facility should provide and/or present (display) the high performing (optimal) ads to the advertiser or merchant related to the high performing or optimal ads (Col. 2: 62 to col. 3: 15).

In general, Lipsky discloses a system that displays ads (experiments) to users and monitors the ads performance by tracking the users' responses to the displayed ads and adjusting the ads variables or parameters (reallocating step) to increase the users' responses or the ads performance, thereby determining one or more higher-performing (optimal) ads that will be presented to users in the future.

Further, Lipsky discloses a method of and a system for, in a computing device, adjusting the execution of an advertising campaign for presenting advertising messages/experiments to a plurality of users or (random website visitors), the advertising campaign, having a plurality of

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advertising alternatives for presenting advertising messages/experiments, comprising: during a first time period, presenting advertising messages/experiments to users among the plurality of users using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives (presenting advertisements/experiments to a randomly selected subset of users from a number/plurality of users or website visitors who are to participate in the advertising campaign); tracking the performance of the advertising campaign with respect to each of the advertising alternatives (advertising messages) across the plurality of users; based upon the tracking during the first time period, attributing a performance score to each of the advertising alternatives for the first time period (measuring the effectiveness of each ad presented to the users by tracking the performance or the users' action...); comparing the scores attributed to the advertising alternatives for the first time period, wherein the comparison is performed using confidence intervals about the performance scores; based upon the comparison, adjusting the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives comparing favorably in the comparison and so as to reduce one or more allocations for advertising alternatives comparing unfavorably in the comparison (determining based on the above comparison, the optimal experiments/advertisements, which maximize the advertisers' return on investment or are more suitable to be displayed to the users (the rest of the users from the plurality of random users)); and during a second time period, presenting advertising messages to users among the plurality using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See claim 3 of the present reference; fig. 2).

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Finally, Lipsky teaches a system for presenting advertising messages in a group of advertising messages to a plurality of random users (random website visitors), comprising: during an evaluation period, presenting the advertising messages to a randomly selected subset of users from the plurality of users/website visitors who are to participate in an advertising campaign; assessing the effectiveness of presenting each of the advertising messages or experiments during the evaluation period across the plurality of users (measuring the effectiveness of each presented advertisement or experiment); assigning presentation weights to the presented advertising messages of the group in accordance with their assessed effectiveness; and during a weighted presentation period, presenting to users among the plurality of users the advertising messages of the group with relative frequencies that are in accordance with their weights (determining one or more optimal advertisements/experiments based on the weighting...) (See claim 5 of the reference; figs.3-5).

Any inquiry concerning this communication from the Examiner should be directed to Jean D. Janvier, whose telephone number is (571) 272-6719. The aforementioned can normally be reached Monday-Thursday from 10:00AM to 6:00 PM EST. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Eric W. Stamber, can be reached at (571) 272- 6724.

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/J. J./

/Jean Janvier/



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